



General

Guideline Title

Best evidence statement (BEST). Support from bedside nurses for caregivers of children newly diagnosed with type 1 diabetes mellitus.

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BEST). Support from bedside nurses for caregivers of children newly diagnosed with type 1 diabetes mellitus. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2013 May 10. 5 p. [5 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The strength of the recommendation (strongly recommended, recommended, or no recommendation) and the quality of the evidence (1a to 5b) are defined at the end of the "Major Recommendations" field.

It is recommended that caregivers of children newly diagnosed with type 1 diabetes mellitus (T1DM), with or without incidence of diabetic ketoacidosis (DKA), receive diabetes education, demonstration of diabetes care skills, comforting presence, and reassurance from inpatient nursing staff (Schmidt et al., 2012 [4a]; Chronic Care: Self-Management Guideline Team, 2007 [5a]; Modi et al., 2012 [5a]).

Definitions:

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

Table of Language and Definitions for Recommendation Strength

Strength	Definition
It is strongly recommended that... It is strongly recommended that... not...	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens. (or visa-versa for negative recommendations)
It is recommended that... It is recommended that... not...	When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation...	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Newly diagnosed type 1 diabetes mellitus (T1DM), with or without incidence of diabetic ketoacidosis (DKA)

Guideline Category

Counseling

Management

Clinical Specialty

Endocrinology

Family Practice

Nursing

Pediatrics

Intended Users

Advanced Practice Nurses

Hospitals

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To evaluate, among caregivers of children newly diagnosed with type 1 diabetes mellitus (T1DM) with or without incidence of diabetic ketoacidosis (DKA), if provision of diabetes self-care management skills ("survival skills"), comforting presence, and reassurance from the bedside registered nurse (RN) promotes perceived emotional support of caregivers by the bedside RN at the time of diagnosis

Target Population

Caregivers of children receiving inpatient care, aged 12 months to 18 years, newly diagnosed with type 1 diabetes mellitus (T1DM) with or without incidence of diabetic ketoacidosis (DKA)

Interventions and Practices Considered

1. Provision of diabetes self-care management skills ("survival skills")
2. Comforting presence
3. Reassurance from the bedside registered nurse (RN)

Note: "Survival skills" is defined as diabetes self-management skills that include blood glucose level monitoring, carbohydrate counting, insulin dosage calculation, administration of insulin via syringe or pen device, and administration of emergency glucagon medication

Major Outcomes Considered

Perceived emotional support of caregivers by the bedside registered nurse (RN)

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Search Strategy

- Databases: Cumulative Index to Nursing and Allied Health Literature (CINHAL), Medline, PsychInfo
- Search Terms: Parental perceptions, new onset type 1 diabetes, emotional support, comforting presence, type 1 diabetes diagnosis, family expectations, bedside nursing, and diabetes survival skills
- Limits or Filters: Publications written in English. Research with human subjects aged 12 months to 18 years
- Final Search: November 20, 2012
- Dates Searched: January 1, 1990 - November 29, 2012

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Rating Scheme for the Strength of the Evidence

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

†a = good quality study; b = lesser quality study

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Table of Language and Definitions for Recommendation Strength

Strength	Definition
It is strongly recommended that... It is strongly recommended that... not...	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens. (or visa-versa for negative recommendations)
It is recommended that... It is recommended that... not...	When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.

Strength	Definition
There is insufficient evidence and a lack of consensus to make a recommendation...	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

This Best Evidence Statement has been reviewed against quality criteria by two independent reviewers from the Cincinnati Children's Hospital Medical Center (CCHMC) Evidence Collaboration.

Evidence Supporting the Recommendations

References Supporting the Recommendations

Chronic Care: Self-Management Guideline Team 2007. Evidence-based care guideline chronic care: self-management. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2007.

Modi AC, Pai AL, Hommel KA, Hood KK, Cortina S, Hilliard ME, Guilfoyle SM, Gray WN, Drotar D. Pediatric self-management: a framework for research, practice, and policy. *Pediatrics*. 2012 Feb;129(2):e473-85. [PubMed](#)

Schmidt CA, Bernaix LW, Chiappetta M, Carroll E, Beland A. In-hospital survival skills training for type 1 diabetes: perceptions of children and parents. *MCN Am J Matern Child Nurs*. 2012 Mar-Apr;37(2):88-94. [PubMed](#)

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Providing families with initial survival skills and emotional support to safely manage type 1 diabetes mellitus (T1DM) is paramount to the successful long term home management of this pediatric population.

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

Implementation of the Guideline

Description of Implementation Strategy

Applicability Issues

In order to provide adequate provision of diabetes survival skills, the inpatient unit must be able to provide educational tools that outline diabetes self-management "survival skills." During orientation, new staff members must have extensive exposure to and education about these same "survival skills" and understand to not teach them to caregivers until they are competent to do so. The unit must also be able to provide adequate staffing to allow time for intensive supportive care and education to new onset families on the inpatient unit. To assure the caregivers are prepared for safe discharged after education and emotional support is provided, accurate documentation in the patient education record to record completion of type 1 diabetes mellitus (T1DM) education topics and psychosocial Patient Plan of Care template must be charted. Lastly, the inpatient nursing staff should be well versed in conversational and interpersonal techniques that provide emotional support to caregivers.

Barriers

Potential barriers to providing diabetes survival skills, comforting presence, and reassurance by staff are allocation of resources to compile and provide teaching materials to caregivers, decreased staff motivation to learn conversational and interpersonal techniques to promote emotionally supportive behaviors, and allocation of funds to appropriately staff the inpatient unit to staff numbers that allow time for intensive supportive nursing and educational sessions.

Implementation Tools

Audit Criteria/Indicators

Patient Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BEST). Support from bedside nurses for caregivers of children newly diagnosed with type 1 diabetes mellitus. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2013 May 10. 5 p. [5 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2013 May 10

Guideline Developer(s)

Cincinnati Children's Hospital Medical Center - Hospital/Medical Center

Source(s) of Funding

No external funding was received for development of this Best Evidence Statement (BEST).

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

Team Leader/Author: Sarah Culver BSN, RN, inpatient nurse A7C2 Diabetes/Endocrinology

Support/Consultant: Mary Ellen Meier MSN, RN, Evidence Based Practice Mentor, Center for Professional Excellence and Business Integration; Barbie Gianbra MS, RN, CPNP, Evidence Based Practice Mentor, Center for Professional Excellence/Research and Evidence Based Practice

Ad Hoc/Content Reviewers: Craig McManiman Social Worker III, MSW, LISW-S; Nicki Orkoskey Child Life Specialist II, MA, CCLS

Patient/Family/Parent or Other Parent Organization: Susan Schultz, parent advisor; Mark Paterno, parent advisor

Financial Disclosures/Conflicts of Interest

Conflicts of interest were declared for each team member. No financial or intellectual conflicts of interest were found.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the [Cincinnati Children's Hospital Medical Center Web site](#) .

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

Availability of Companion Documents

The following are available:

- Judging the strength of a recommendation. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [Cincinnati Children's Hospital Medical Center \(CCHMC\) Web site](#) .
- Grading a body of evidence to answer a clinical question. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [CCHMC Web site](#) .
- Table of evidence levels. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2009 May 7. 1 p. Available from the [CCHMC Web site](#) .

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

In addition, suggested process or outcome measures are available in the [original guideline document](#) .

Patient Resources

The following is available:

- Diabetes center. Comprehensive care for long-term diabetes management. Cincinnati (OH): Cincinnati Children's Hospital Medical Center. Available from the [Cincinnati Children's Hospital Medical Center Web Site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on September 6, 2013.

Copyright Statement

This NGC summary is based on the original full-text guideline, which is subject to the following copyright restrictions:

Copies of this Cincinnati Children's Hospital Medical Center (CCHMC) Best Evidence Statement (BEST) are available online and may be distributed by any organization for the global purpose of improving child health outcomes. Examples of approved uses of the BEST include the following:

- Copies may be provided to anyone involved in the organization's process for developing and implementing evidence based care;
- Hyperlinks to the CCHMC website may be placed on the organization's website;
- The BEST may be adopted or adapted for use within the organization, provided that CCHMC receives appropriate attribution on all written

or electronic documents; and

- Copies may be provided to patients and the clinicians who manage their care.

Notification of CCHMC at EBDMInfo@cchmc.org for any BEST adopted, adapted, implemented or hyperlinked by the organization is appreciated.

Disclaimer

NGC Disclaimer

The National Guideline Clearinghouse^{â„¢} (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the [NGC Inclusion Criteria](#).

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.